Isometric block builder - answers

Worked answers / Keep separate from the student sheet.

1. A solid occupies a 2 by 2 rectangle of unit cubes at z=0, plus one cube above its corner. Find volume and occupied top-view squares.

Volume = 2 x 2 + 1 = 5 cubic units. Top view: 4 squares; the stacked cube does not add a new top position.

2. A solid occupies a 3 by 2 rectangle of unit cubes at z=0, plus one cube above its corner. Find volume and occupied top-view squares.

Volume = 2 x 3 + 1 = 7 cubic units. Top view: 6 squares; the stacked cube does not add a new top position.

3. A solid occupies a 4 by 2 rectangle of unit cubes at z=0, plus one cube above its corner. Find volume and occupied top-view squares.

Volume = 2 x 4 + 1 = 9 cubic units. Top view: 8 squares; the stacked cube does not add a new top position.

4. A solid occupies a 5 by 2 rectangle of unit cubes at z=0, plus one cube above its corner. Find volume and occupied top-view squares.

Volume = 2 x 5 + 1 = 11 cubic units. Top view: 10 squares; the stacked cube does not add a new top position.

5. A solid occupies a 6 by 2 rectangle of unit cubes at z=0, plus one cube above its corner. Find volume and occupied top-view squares.

Volume = 2 x 6 + 1 = 13 cubic units. Top view: 12 squares; the stacked cube does not add a new top position.

6. A solid occupies a 7 by 2 rectangle of unit cubes at z=0, plus one cube above its corner. Find volume and occupied top-view squares.

Volume = 2 x 7 + 1 = 15 cubic units. Top view: 14 squares; the stacked cube does not add a new top position.

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